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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/596,377

09/04/2007

Kevin S. Davies

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EXAMINER

LEE, DOUGLAS S

ART UNIT

PAPER NUMBER

2121

MAIL DATE

DELIVERY MODE

05/11/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/596,377	Applicant(s) DAVIES, KEVIN S.	
	Examiner DOUGLAS S. LEE	Art Unit 2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,25,26,28-31 and 54-61 is/are rejected.
- 7) ☒ Claim(s) 3-24,27 and 32-53 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment and Arguments

Applicant's amendments (added new claims 58-61) arguments (claims 1-57) filed 12/30/2010; claims 1, 28, and 29 rejections 35 USC 102(e) Lindstrom (US Pat. No. 6,644,080); claims 2, 25, and 26 rejections 35 USC 103(a)) have been fully considered but they are not persuasive in part. The office maintained the rejections of claims 1, 28, and 29 35 USC 102(e) Lindstrom (US Pat. No. 6,644,080) and claims 2, 25, and 26 rejections 35 USC 103(a). Claims 3-24, 27, and 32-53 are objected.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1, 28, 29, 30, and 54-61 are rejected under 35 U.S.C. 102(e) as being anticipated by Lindstrom (US Pat. #6,644,080).

Regarding claim 1, Lindstrom discloses a control system for use with a machine having a tool arranged to move through a known path of movement, the control system characterized by comprising: a means for detecting the location of objects in or adjacent the path of the tool (col. 6, lines 10-35, element 48); and a processing and control means arranged to determine the distance between the objects in or adjacent the path of the tool and a leading edge of the tool (col. 6, lines 10-35, element 18); wherein the control system includes a first mode of operation in which the processing and control means controls movement of the tool such that the distance between the objects in or adjacent the path of the tool and the leading edge of the tool is maintained within minimum and maximum values (col. 6, lines 10-35). Applicant alleges that

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Lindstrom does not determine a vertical distance between the objects and the tool. However, see col. 1, lines 35-50 states that independent back gauge fingers are used for those complicated bends and/or apart that may have to be taken from tow different bends depths with reference to the center of the upper and lower tools along the x axis. Thus it is clear that the vertical distance between the objects and the tool is determined.

Regarding claim 28, Lindstrom discloses the processing and control means comprises a software program residing on a digital signal processor (col.5, lines 25-35).

Regarding claim 29, Lindstrom discloses wherein the minimum value is set to zero such that the tool approaches the objects when the distance between the objects in or adjacent the path of the tool and the leading edge of the tool is greater than the maximum value but does not retract away from the objects (col. 8, lines 1-21).

Regarding claim 30, this method claim is rejected for the same reasons applied above rejected system claim 1.

Regarding claims 54-61, this method claim is rejected for the same reasons applied above rejected system claims 1, 28, 29, and 30.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 2, 25, 26 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindstrom (US Pat. #6,644,080) in view of Appleyard (US Pat. 6,903,327) and Chen et al. (US Pat. #6,122,023).

Regarding claim 2, the sole difference between this claim and Lindstrom is the processing and control means such that the processing and control means recognizes the presence of obstructions in the region by the images received by the light receiving means. However, Appleyard discloses processing and control means such that the processing and control means recognizes the presence of obstructions in the region by the images received by the light receiving means. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use such processing and control means recognizes the presence of obstructions in the region by the images received by the light receiving means in order to improve the overall safety system for an industrial press.

Regarding claims 25 and 26, the difference between this claim and modified Lindstrom is the light emitting means which includes a laser diode and the current through the laser diode is modulated to create varying speckle patterns and thereby improve resolution of the received image. Chen et al. disclose the light emitting means which includes a laser diode and the current

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through the laser diode is modulated to create varying speckle patterns and thereby improve resolution of the received image. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use such the light emitting means which includes a laser diode and the current through the laser diode is modulated to create varying speckle patterns and thereby improve resolution of the received image in order to improve the overall the resolution of the images by eliminating speckle.

Regarding claim 31, this method claim is rejected for the same reasons applied above rejected system claim 2.

Allowable Subject Matter

5. Claims 3-24, 27 and 32-53 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Douglas Lee, whose telephone number is (571) 272-3745. The examiner can normally be reached on Monday-Friday from 8:00AM- 4:30PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Albert Decady*, can be reached on (571) 272-3819 or via e-mail addressed to *[albert.decady@uspto.gov]*. The fax number for this Group is (571) 273-8300.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to **[doug.lee@uspto.gov]**.

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (in USA or CANADA) or 571-272-1000.

/D. S. L./
Examiner, Art Unit 2121

/Ramesh B. Patel/

Primary Examiner, Art Unit 2121